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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/718,042

11/21/2003

Olivier Divay

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7139

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EXAMINER

VO, HUYEN X

ART UNIT

PAPER NUMBER

2626

MAIL DATE

DELIVERY MODE

11/01/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/718,042

Applicant(s)

DIVAY ET AL.

Examiner

Huyen X. Vo

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 21-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 21-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

1. Applicant's election, without traverse, of claims 1-13 and 21-26 in the reply filed on 8/21/2007 is acknowledged.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3, 13, 21-23, and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Nishimura et al. (US 6778958).
3. Regarding claims 1 and 13, Nishimura et al. disclose a method and an apparatus of recognizing punctuation in computer-implemented speech recognition, the method comprising:

performing speech recognition on an utterance to produce a recognition result for the utterance (*col. 5, lines 5-34 or figure 2*);

identifying a non-verbalized punctuation mark in a recognition result (*col. 5, lines 5-34 or figure 2*); and

formatting the recognition result based on the identification (*col. 5, lines 5-34 or figure 2*).

4. Regarding claims 21 and 26, Nishimura et al. disclose a method of recognizing punctuation in computer-implemented speech recognition dictation, the method comprising:

performing speech recognition on an utterance to produce a recognition result for the utterance (*col. 5, lines 5-34 or figure 2*);

identifying a non-verbalized punctuation mark in a recognition result (*col. 5, lines 5-34 or figure 2*); and

determining where to insert the non-verbalized punctuation mark within the recognition result based on the identification using at least one text feature and at least one acoustic feature related to the utterance to predict where to insert the non-verbalized punctuation mark (*col. 5, lines 5-34 or figure 2, using pause/silence to determine punctuation marks*).

5. Regarding claims 2-3 and 22-23, Nishimura et al. further disclose the method as in claims 1 and 21, respectively, wherein identifying the non-verbalized punctuation mark includes predicting the non-verbalized punctuation mark using at least one text feature and at least one acoustic feature related to the utterance (*col. 5, lines 35-67, using pause and recognized words to determine punctuation marks*), wherein the acoustic feature includes a period of silence (*col. 5, lines 35-67, pause*).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 4-6 and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura et al. (US 6778958) in view of Rorex (US 7089184).

8. Regarding claims 4-6 and 24-26, Nishimura et al. fail to specifically disclose the method as in claims 2 and 21, respectively, wherein the acoustic feature includes a function of pitch of words near the period of silence, wherein the acoustic feature includes an average pitch of words near the period of silence, and wherein the acoustic feature includes a ratio of an average pitch of words near the period of silence. However, Rorex teaches wherein the acoustic feature includes a function of pitch of words near the period of silence, wherein the acoustic feature includes an average pitch of words near the period of silence, and wherein the acoustic feature includes a ratio of an average pitch of words near the period of silence (*col. 10, lines 17-27, tonality or pitch information is used to determine punctuation marks*).

Since Nishimura et al. and Rorex are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at

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the time of invention to modify Nishimura et al. by incorporating the teaching of Rorex in order to improve punctuation recognition accuracy.

9. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura et al. (US 6778958) in view of Kolster (US 5920877).

10. Regarding claims 7-9, Nishimura et al. fail to specifically disclose the method as in claim 1 wherein formatting the recognition result includes controlling or altering spacing relative to the non-verbalized punctuation mark, wherein formatting the recognition result includes controlling or altering capitalization of words relative to the non-verbalized punctuation mark, and wherein the non-verbalized punctuation mark includes a period, and formatting the recognition result includes inserting an extra space after the period and capitalizing a next word following the period. However, Kolster teaches wherein formatting the recognition result includes controlling or altering spacing relative to the non-verbalized punctuation mark (*col. 11, lines 38-50*), wherein formatting the recognition result includes controlling or altering capitalization of words relative to the non-verbalized punctuation mark (*col. 11, lines 38-50*), and wherein the non-verbalized punctuation mark includes a period, and formatting the recognition result includes inserting an extra space after the period and capitalizing a next word following the period (*col. 11, lines 38-50*).

Since Nishimura et al. and Kolster are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at

the time of invention to modify Nishimura et al. by incorporating the teaching of Kolster in order to put the received text into organized structure to make good presentation.

11. Claims 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura et al. (US 6778958) in view of Franz et al. (US 6356865).

12. Regarding claims 10-13, Nishimura et al. fail to specifically disclose the method as in claim 1 further comprising: selecting a portion of the recognition result to be corrected that includes the non-verbalized punctuation mark; and correcting the portion of the recognition result that includes the non-verbalized punctuation mark with one of a number of correction choices, wherein at least one of the correction choices includes a change to the non-verbalized punctuation mark, wherein at least one of the correction choices does not include the non-verbalized punctuation mark. However, Franz et al. teach selecting a portion of the recognition result to be corrected that includes the non-verbalized punctuation mark; and correcting the portion of the recognition result that includes the non-verbalized punctuation mark with one of a number of correction choices, wherein at least one of the correction choices includes a change to the non-verbalized punctuation mark, wherein at least one of the correction choices does not include the non-verbalized punctuation mark (*the operation of figure 13*).

Since Nishimura et al. and Franz et al. are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the

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art at the time of invention to modify Nishimura et al. by incorporating the teaching of Franz et al. in order to speech recognition accuracy.

Conclusion

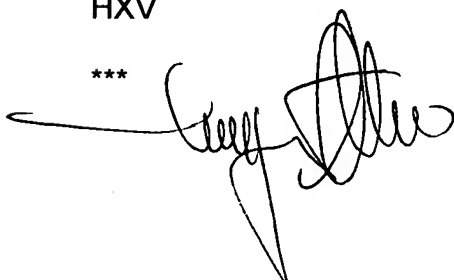
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huyen X. Vo whose telephone number is 571-272-7631. The examiner can normally be reached on M-F, 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on 571-272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HXV

10/20/2007

A handwritten signature in black ink, appearing to be 'Huyen X. Vo', with a long horizontal line extending to the left.